CLAIMS:

1. Integrated circuit comprising a plurality of modules (M1 to M5, CPU) for processing applications, comprising:

- a global memory (GM), which can be shared by said plurality of modules (M1 to M5, CPU);
- an interconnect means (IM) for interconnecting said modules (M1 to M5, CPU) and said global memory (GM) based on a plurality of communication services (C1, C2); and
- at least one communication managing unit (CMU) for managing the communication between said plurality of modules (M1 to M5), wherein said communication managing unit (CMU) receives a request for a communication between at least two of said modules (M1 to M5, CPU) and dynamically selects one of said plurality of communication services (C1, C2) as basis for the requested communication between said modules (M1 to M5, CPU).

2. Integrated circuit according to claim 1, wherein

the communication services (C1, C2), which requires the least interconnect resources, is selected.

3. Integrated circuit according to claim 1 or 2, wherein

a second communication service (C1) is selected allowing a memory-based communication between at least two of said modules (M1 to M5, CPU), if the granularity and data rates of the two modules (M1 to M5, CPU) do not matches or if one of said two modules (M1-M5, CPU) does not comprise sufficient local buffering.

4. Integrated circuit according to claim 1 or 2, wherein

a second communication service (C2) is selected allowing a direct communication between two of said modules (M1-M5, CPU), if the granularity and data rates of the two modules (M1-M5, CPU) matches and if one of said two modules (M1-M5, CPU) comprises sufficient local buffering.

5. Integrated circuit according to claim 3 or 4, wherein the selection is performed every time a request for establishing a communication between at least two of said plurality of modules (M1 to M5, CPU) is received by the communication managing unit (CMU).

6. Integrated circuit according to claim 1 or 5, wherein resources, which were reserved for the communication between said two of said plurality of modules, are released after having performed the requested communication.

7. Integrated circuit according to claim 1, wherein said applications running on said modules are resource constrained.

8. Method for selecting communication services in an integrated circuit comprising a plurality of modules (M1 to M5, CPU) for processing applications, and a global memory (GM) being adapted to be shared between said plurality of modules (M1 to M5, CPU), comprising the steps of:

- managing the communication between said plurality of modules (M1 to M5), by receiving a request for a communication between at least two of said modules (M1 to M5, CPU) and by dynamically selecting one of said plurality of communication services (C1, C2) as basis for the communication between said modules (M1 to M5, CPU).